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SUGHRUE MION, PLLC				
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EXAMINER				
QURESHI, AFSAR M				
ART UNIT		PAPER NUMBER		
2472				
NOTIFICATION DATE		DELIVERY MODE		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

SUGHRUE@SUGHRUE.COM
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Office Action Summary

Application No.

10/043,326

Applicant(s)

ROULLET ET AL.

Examiner

AFSAR M. QURESHI

Art Unit

2472

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 August 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Response to Amendment

1. This Office Action is responsive to amendment received on 08/03/2009.

Drawings

2. Applicant re-submitted drawings that were objected to (see Non-Final Rejection, dated 03/03/2009). The drawings are objected to because it has details such as "Docket No. Q68075: Amdt. Dated July 10, 2008; etc., " on top of the sheet. Applicant is requested to remove the above details and use 'ANNOTATED SHEET ' per 37 CFR 1.121(d)(1).

Response to Arguments

3. Applicant's arguments filed 08/03/2009 have been fully considered but they are not persuasive.

Applicant maintained that the cited art fails to disclose claimed "empty cells". The "silence codes" disclosed by cited reference Feldman do not correspond to the claimed "empty cells".

Examiner notes that an inventor is entitled to be his or her own lexicographer. However, an inventor must define specific terms used to describe invention with reasonable clarity, deliberateness, and precision and set out his/her uncommon definition in some manner *within the patent disclosure* so as to give one of ordinary skill in the art *notice of the change in meaning* (*Intellicall, Inc. v. Phonometrics, Inc.*, 925 F.2d 1384, 1387-88, 21 USPQ2d 1383, 1386 (Fed. Cir. 1992). Where an **explicit**

definition is provided **in the Disclosure** by the Applicant for a term, that definition will control interpretation of the term as it is used in the claim. Meaning of words used in a claim is not construed in a "lexicographic vacuum", but in the context of the Specification and drawings. Any special meaning assigned to a term "must be sufficiently clear in the Specification" that any departure from common usage would be understood by a person of experience in the field of the invention.

In the Specification, an empty information cell is generally disclosed as a "filler cell". A "filler cell", in the pertinent art, is considered to be same as a 'blank cell' or a 'silent code' or an 'empty cell' containing specified sequence bits representing that the cell is a blank cell or an empty cell and can be inserted in a transmitted stream (padding) for various reasons, for example, synchronization.

Further, the term "empty information cells" in claim 1 is used by the claim to mean "*empty information cell that contains nothing, e.g., no data*" (see Arguments, 8/3/2009, page 5, lines 10-11) while the accepted meaning is "filler cell" (as defined above). The term is indefinite because the Specification does not clearly redefine the term. A rejection under 35 U.S.C. § 112, 2nd paragraph, is withheld pending further clarification of the term within the Specification.

As responded to, in "Advisory Action", dated 05/29/2008, the terminology "empty information cells" was considered during the examination of the claim and not just "empty". In the absence of a specific and explicit meaning of "empty information cell" in the Disclosure, Examiner will continue to rely on how it is broadly understood or interpreted by one of skill within the confines of relevant art.

On page 4, Applicant argued that Examiner is being inconsistent in alleging that the comparator 25, corresponding to the claimed steam analyzer, is not a part of network station (corresponding to the claimed Relay).

As pointed out in the rejection of claims 1 and 4 (paragraph 3, Office Action dated 9/10/2007), figures 2 and 5 are disclosed as earth station wherein figure 5 has more details showing a comparator in addition to all other elements of figure 2. Since both drawings are that of an earth station (claimed Relay), Examiner maintains that the comparator 25 is part of network station (claimed Relay) (see col. 2, details of figures 2 and 5, also col. 4, lined 45-56 where more details are disclosed of an earth station).

Applicant further argued that Examiner is silent about, "... stream analyzer for determining if an information stream received by said receiver is a Real-time information stream or a differed-time information stream cells in a ..."

Feldman discloses that a voice signal V is analyzed by a pitch estimation stage 46 which estimates the fundamental frequency. A voiced or unvoiced determination state 48 evaluates the voicing measure of each of a number of non-overlapping frequency bands of the voice spectrum and generates a set of decisions as to whether the voice signal V is voiced or unvoiced in each band (determining if the information stream is real-time or differed-time). (See col. 3, lines 60 through col. 4, lines 1-11).

The pending claims have been given their broadest reasonable interpretation consistent with the Specification and with the interpretation that a skilled artisan in the art would reach.

Examiner maintains rejection as under:

Claim Rejections - 35 USC § 102

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 1, 4 and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Feldman (US 6,393,000).

As to claims 1 and 4, Feldman discloses a network station 4, a *relay for use in telecommunication equipment* (figs. 5, earth stations), receiving information streams from PSTN 2, consisting of signal and data (D and V) including 'silence code' (*empty cells*), a packet data interface unit 12 (*mixer*) detects the silence code received from codec 10. Codec 10 comprising a stream analyzer 46 (fig. 3) analyzing information stream (see col. 3, lines 60 through col. 4, lines 1-5). Comparator 25 stores cell information (*memory*). Decoder 22 (fig. 5) extracts identifying code ID (*waiting cells*) from comparator 25, based on the match, the comparator 25 closes a data switch 26 and the decoder outputs the data (i.e., the combined function of switch 26 works as *transmitter*), replacing empty information cells with waiting cells (see col. 4, lines 23-56).

Feldman further discloses that the data is stored in LES 4 with silence codes and voice signal V is analyzed for voiced/unvoiced stream (determining *for real-time stream or a differed-time stream*) and generates a set of decisions to choose from the stored data ((See col. 3, lines 60 through col. 4, lines 1-11).

As to claim 7, the telecommunication equipment disclosed by Feldman is in satellite environment (see, for example, figure 1, col. 5, lines 7-17).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2, 3, 5, 6, 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Feldman in view of Thiesfeld (US 6,529,971).

In addition to the limitations discussed above in the rejection of claims 1, 4 and 7, Feldman discloses time sequence functionality (see col. 5, lines 43-50). Feldman is concerned, essentially, to a fair bandwidth allocation and transmission scheduling where policing functions are required to guarantee the QoS established at call set up by controlling the bit rate behavior during voice communication where bandwidth is reserved and/or facsimile communication based on needed bit rate. During voice communication silence codes are included. One of ordinary skill in the art would readily

realize that the silence codes (empty information cells) are related to a difference between needed bit rate and reserved bandwidth (claims 8 and 9).

Feldman is silent about a relay with a Deleter, as in claims 2 and 5 and Mixer adapted to choose waiting cells as a function of time scheduling rules (claims 3 and 6).

Thiesfeld, in the field of transmission of information signal, discloses an adaptive elasticity first-in, first-out (FIFO) buffer, with a control circuit monitoring *deletion* in the FIFO buffer that is also a *deleter*. The FIFO buffer 316 stores the word from decoders 314, a state machine 365 controls a read/write pointers to maintain the first-in, first-out logic and to provide *fill words* (see Abstract and col. 6, lines 23 through col. 7, lines 1-2).

Therefore, it would have been obvious to one having ordinary skill in the art, at the time of invention, to be able to modify Feldman (see fig. 5) by incorporating FIFO buffer including state machine 365 of Thiesfeld to enable a mixer (or decoders) to choose waiting cells in time scheduling fashion. By incorporating FIFO, as above, will reduce the interference between the signals and enhance the transmission of information signals desired by Feldman (see col. 2, lines 14-22).

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Yoshida et al. (US 5,796,720) and Oskouy et al. (US 6,791,947) [Empty cells and Relay Buffer].

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AFSAR M. QURESHI whose telephone number is (571)272-3178. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on (571) 272 7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

10/30/2009

/Afsar M Qureshi/
Primary Examiner
Art Unit 2472